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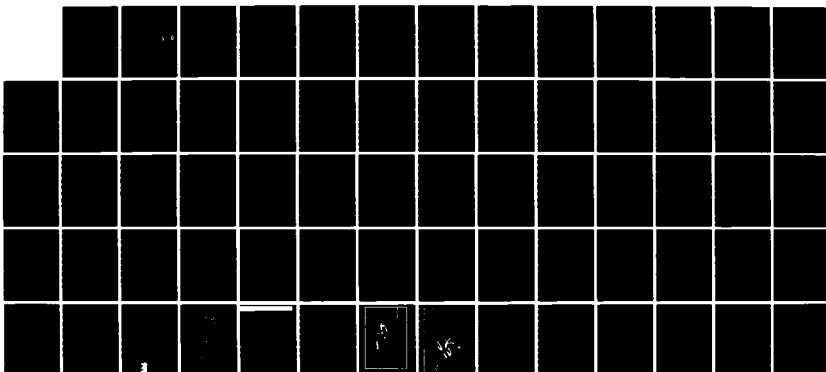
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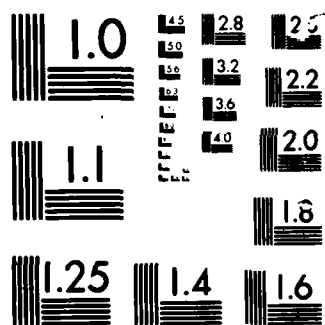
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COMMAND AND CONTROL OF U.S. ARMY AMPHIBIOUS OPERATIONS:

AN ESSENTIAL ELEMENT OF PROJECTING COMBAT POWER

by

MAJOR DUANE E. BYRD

Armor

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School of Advanced Military Studies
U.S. Army Command and General Staff College
Fort Leavenworth, Kansas

31 December 1985

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ABSTRACT

COMMAND AND CONTROL OF U.S. ARMY AMPHIBIOUS OPERATIONS: AN ESSENTIAL ELEMENT OF PROJECTING COMBAT POWER, by Major Duane E. Byrd, USA, 56 pages.

This study investigates the hypothesis that command and control functions have a vital impact on the success or failure of amphibious operations. Based on this hypothesis, this study analyzes the amphibious assault landings conducted during Operation TORCH (November 1942, North Africa) and Operation CHAMPAGNE (November 1950, Inchon Landing) to examine how command and control functions of U.S. Army Marine Corps ship-to-shore amphibious operations have evolved since World War II, how adequate they are today and what are the implications for the future. The Mass de Ceege Combat Power Model is used in this study to provide an analytical framework for understanding the components of combat power and highlights span of control, standard operating procedures and doctrine, unit staff efficiency, and adequate communications as the critical functions that form the basis for efficient command and control.

The study concludes that the existing amphibious doctrine requires revision. It argues that there is an over-reliance on radios to control the ship-to-shore movement of amphibious assault landings which reduces the need to clearly understand the commander's intent. Additionally, the doctrine ignores the importance of the human dimension to the ultimate success of amphibious assault landings. Finally, the study recommends that amphibious doctrine should incorporate historical examples which demonstrate how individual and unit initiative facilitates the control of units during the ship-to-shore movement of amphibious assault landings and how initiative serves to diminish the "friction" and "fog of war" which dominate the beaches as the landing force arrives ashore.

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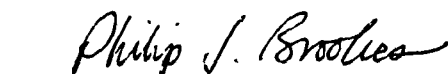
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SECTION I

INTRODUCTION

The amphibious assault is unquestionably one of the most powerful and important forms of offensive warfare known to man. It is characterized by deception, surprise, and the ability of the attacker to rapidly increase combat power ashore once a foothold has been obtained. The amphibious assault is also one of the most difficult military operations for armed forces to execute. Even among the wealthy, industrialized nations of the world, relatively few today can afford to develop and maintain a capability for large-scale amphibious operations. Historically, nations with armed forces capable of successfully conducting large-scale amphibious assaults on hostile shores have possessed a significant, often vital, means of projecting combat power against their enemies. One need only look back to our experience in World War II and the Korean War to be reminded that such a capability was absolutely essential to the success of the United States and her allies against Germany, Japan, and North Korea.

Since World War II, the United States has maintained a significant capability for the conduct of large-scale amphibious operations. Although this capability has declined considerably from the peak attained during the years 1943-1945 when the U.S. armed forces were able to mount massive amphibious operations simultaneously in the European and Pacific theaters, the United States today still possesses an amphibious capability unsurpassed by any other nation including the U.S.S.R. Despite the considerable experience and expertise in the conduct of amphibious operations which the U.S. Army acquired in the course of World War II and the Korean War, the U.S. Army's readiness to carry out successful amphibious operations on short notice today is problematical. At present, it would appear that within our armed forces only the U.S. Marine Corps

maintains a high degree of readiness to conduct such operations on short notice. Nevertheless, the U.S. Army is not without major responsibilities in this area.

In fact, the U.S. Marines and the U.S. Army have a collateral responsibility for amphibious operations. Joint Chiefs of Staff Publication 2, Unified Action Armed Forces (UNAAF), assigns the U.S. Army a collateral responsibility for developing amphibious doctrine and tactics. Furthermore, the U.S. Army is required to maintain forces which are capable of being employed as the ground combat element of a landing force during the execution of joint amphibious operations.¹ Additionally, an inherent aspect of the U.S. Army's operational mission is to maintain a state of readiness so that it is capable of engaging in "any war, anywhere, any time, in any manner."² The implications for the U.S. Army, based on the two charters mentioned above, are far reaching and place critical demands on the entire force. It is imperative that U.S. Army leaders be fully cognizant of their responsibilities as members of a joint amphibious task force.

The U.S. Army's capability to conduct amphibious operations reached its zenith during World War II, as has already been mentioned. Since 1945, the Army has gradually relegated the amphibious mission to a lower priority while more traditional roles have received greater emphasis. The relevance of this topic is reinforced by the importance U.S. Army doctrine places on the joint nature of future operations. Additionally, Operation URGENT Fury, conducted during October 1983 in Grenada by the U.S. armed forces, has underscored the importance of effective command and control in the execution of joint operations.

In order to insure a common basis of understanding between the author of this study and the reader, command and control must be defined and some of the most vital functions related to the command and control of amphibious operations delineated. For the purpose of this study, command and control has been defined as the exercise of command as a means to implement the commander's will in pursuit of the unit objectives.³ As expressed in Field Manual 100-5 (Draft), Operations, the essence of command and control lies in applying leadership, making decisions, issuing orders, and supervising operations.⁴ Based on the aforementioned considerations and an analysis of the amphibious assault landings conducted during Operation TORCH (November 1942, North Africa) and Operation CHROMITE (September 1950, Inchon Landing) some of the most vital command and control functions for amphibious assault landings are defined as the immediate transfer of command ashore from the amphibious task force commander to the landing force commander; the effective use of the supporting arms to support the landing force once ashore; and the subsequent execution of the land campaign once the assault phase is completed.

This study has been undertaken to examine the hypothesis that command and control functions have a vital impact on the success or failure of amphibious operations. Based on this hypothesis, this study addresses the key question of how have command and control functions of U.S. Army ship-to-shore amphibious operations evolved since World War II, how adequate they are today, and what their implications are for the future. Other questions which have been addressed in this study because of their relevance to the question mentioned above include: When does the amphibious task force commander (CATF) transfer command ashore to the landing force commander (CLF)? Where should the landing force commander be located to best control the ship-to-shore movement? Finally, have the command and control lessons from past amphibious assault landings been incorporated into the existing amphibious operations doctrine?

Five assumptions have been made in order to limit the scope of the problem considered in this study. First, the U.S. Marine Corps will not be the only U.S. armed service to conduct ship-to-shore amphibious assault landings in the future; U.S. Army divisions will be involved in major joint ship-to-shore amphibious operations. Second, U.S. armed forces may not have air supremacy in the entire area of operations, but will possess at least air superiority in the area where ship-to-shore amphibious operations are being conducted. Third, U.S. Naval gunfire support will be required to provide fire support for the ground combat element during ship-to-shore amphibious operations. Fourth, command and control lessons learned from U.S. Marine Corps ship-to-shore amphibious operations can be applied to similar operations conducted by U.S. Army units provided U.S. Army unique equipment and capabilities are taken into consideration. Finally, only fielded equipment will be considered available for the conduct of U.S. Army ship-to-shore operations.

The methodology used in this study has been to examine two amphibious operations conducted by U.S. armed forces in past conflicts, one during World War II, and the other during the Korean War, to determine the types of command and control functions and relationships which were useful in controlling the ship-to-shore movement during amphibious operations. It is intended that these two case studies will provide insights and criteria for effective command and control of the ship-to-shore movement during an amphibious assault.

Operation TORCH (November 1942, North Africa), was selected as one of the case studies for this study because of the short amount of planning time between the decision to conduct the amphibious operation and the execution of the operation, and the impact command and control functions exerted on the U.S. Army's first amphibious operation of World War II. The specific focus of this

particular case study will be the command and control aspects of the 3d Infantry Division's ship-to-shore movement as part of Major General George S. Patton's Western Task Force (The 3d Infantry Division will be referred to as Sub-Task Force BRUSHWOOD for the remainder of this study based on the fact that the division was reinforced with other units for Operation TORCH.)

Operation CHROMITE (September 1950, Inchon Landing) was examined with the object of determining how well the command and control lessons learned from World War II amphibious operations had been assimilated by the time of the Korean War. (NOTE: Since the 1st Marine Division was the ground combat element of the U.S. X Corps which conducted the initial assault landing during the Inchon Landing, the study has addressed the command and control aspects of the 1st Marine Division's assault landing considering those aspects of the ship-to-shore movement which would have been similar for a U.S. Army unit conducting this same operation.)

The command and control functions and relationships of the assault landings of Sub-Task Force BRUSHWOOD and the 1st Marine Division have been analyzed by using a part of the Wass de Czege Combat Power Model. The Wass de Czege Combat Power Model was developed by Colonel Huba Wass de Czege, one of the U.S. Army's premier doctrine writers and one of the primary authors of FM 100-5, Operations, the U.S. Army's current doctrinal field manual which discusses warfighting at the tactical and operational levels. In addition to having co-authored the current edition of Field Manual 100-5, Colonel Wass de Czege was instrumental in the establishment of the School of Advanced Military Studies at Fort Leavenworth, Kansas.

The Wass de Czege Combat Power Model is a tool which provides an analytical framework for understanding the components of combat power and the process of generating combat power to win battles at the tactical level of war. Essentially, the Wass de Czege Combat Power Model advocates that the outcome of

battles depends upon the difference in the combat power of the antagonists.⁵ Colonel Wass de Czege further states that combat power is the result of leaders applying the firepower, maneuver, and protection capabilities of their units which ultimately determines who wins or loses a particular battle.⁶ Additionally, Wass de Czege argues that the ability to maximize your own capabilities while degrading your adversary's capabilities is a time honored principle which should be applied today in evaluating battles. Colonel Wass de Czege has included criteria for evaluating the effectiveness of each of the four components of the Combat Power Model (See APPENDIX G for the command and control criteria which were extracted from the Maneuver Effects Component and used in this study.) These criteria have been used to evaluate the effectiveness of the command and control functions of the ship-to-shore movement during Operations TORCH and CHROMITE, as well as to evaluate the adequacy of the existing doctrine concerning the command and control of ship-to-shore movements during an amphibious assault.

SECTION II

U.S. ARMY AMPHIBIOUS DOCTRINE EMERGES

AS AMERICA PREPARES FOR WORLD WAR II

Prior to 1940, the U.S. Army was generally content to allow the U.S. Marine Corps to be the U.S. armed forces' sole proponent for amphibious warfare doctrine and tactics. The fall of the Low Countries and France in May-June 1940, the German occupation of Western Europe, and the consequent closing of all friendly ports on the European Continent caused the U.S. War Department to take a sudden interest in amphibious warfare doctrine and even to begin planning for potential large-scale amphibious operations as part of possible operations to be conducted

in the Caribbean and on the Newfoundland coast.¹ Ultimately, of course, the U.S. Army would play a leading role in the conduct of the Allied landings on the coast of Normandy in June 1944, the mightiest amphibious operation ever conducted.

The U.S. Army's initial attempt to train selected units for amphibious operations and to refine amphibious warfare doctrine was curtailed by the United States' entry into World War II in December 1941. The U.S. Army then attempted to resolve its amphibious training deficiency by embarking on an expanded amphibious training program which included participation with the U.S. Marines in what were called Joint Training Forces.² The 1st Marine Division and the U.S. Army's 1st Infantry Division were organized as the First Joint Training Force in June 1941. By July 1941, the First Joint Training Force was conducting large-scale landing operations near its East Coast headquarters, Camp Lejeune, North Carolina.³ During this same time, the Second Joint Training Force was organized at Camp Pendleton, California, and consisted of the 2d Marine Division and the U.S. Army's 3d Infantry Division. Both of the Joint Forces were short-lived, primarily because the units involved were reassigned to other places; most notably, the 1st Marine Division was ordered to the Pacific for participation in the Guadalcanal campaign--the first American amphibious operation of World War II.⁴

The First Joint Training Force's January 1942 landing operation demonstrated how incompetent the U.S. armed forces were in the execution of amphibious operations. The First Joint Landing Force had conducted a large-scale landing operation at Camp Lejeune during August 1941. A subsequent, even larger landing operation, scheduled for December 1941, was ultimately postponed to January 1942 and moved to Cape Henry, Virginia in the Chesapeake Bay because of the danger of enemy submarines off the North Carolina coast.⁵ None of the U.S. armed services were at their best for the January 1942 Cape Henry amphibious exercise. The Army

was able to send only half of a division and the Marines only a couple of battalions to participate in the exercise.⁶

In spite of the shortcomings of the other U.S. armed services, the U.S. Navy suffered the harshest criticisms for its performance in the Cape Henry exercise. Brigadier General (later Lieutenant General) Howland M. Smith, U.S. Marine Corps, commanded the landing operation and afterwards chastised the U.S. Navy for failing to provide suitable transports or adequate combatant vessels and aircraft for the operation. General Smith also criticized the U.S. Navy for its failure to provide naval gunfire or air support groups for the exercise. General Smith shortened the exercise to two days and characterized it as more of a ship-to-shore practice than a full-scale amphibious exercise.⁷ The U.S. Navy's inability to land troops on designated beaches caused General Smith to rate the ship-to-shore movement of the operation as a tactical failure.⁸ Many of the problems highlighted by General Smith concerned severe deficiencies in the command and control structure of the amphibious assault landing. The command and control deficiencies mentioned by General Smith were characteristic of U.S. Army units unfamiliar with amphibious operations and who were simultaneously attempting to master a doctrine which had been adopted by the U.S. Army less than four years before.⁹ It is interesting to note that some of the command and control problems highlighted by General Smith in his critique of the January 1942 Cape Henry exercise, such as the Navy's inability to land troops on designated beaches, would reappear during Sub-Task BRUSHWOOD's assault landing at Fedala, French Morocco in November 1942.

Results of the Cape Henry exercise increased the U.S. Army's desire to have its own amphibious training center. By 1 June 1942, the U.S. Army had established such a facility at Camp Edwards, Massachusetts.¹⁰ The Army subsequently opened a second amphibious training center at Camp Gordon, Florida.

These amphibious training centers would ultimately train twenty one of the twenty eight amphibious trained U.S. Army divisions which ultimately fought in World War II.¹¹

While U.S. Army units prepared for amphibious operations during 1941-1942, American leaders worked out a strategy with British leaders concerning future Anglo-American military operations during 1942-1943. President Franklin D. Roosevelt and Prime Minister Winston S. Churchill recognized the strategic necessity for military operations in French North Africa in 1942. If Germany's military power was to be destroyed in 1943, the first step would be to establish a base of operations in French North Africa in 1942 for the purpose of supporting subsequent Anglo-American military operations on the European continent. Additionally, President Roosevelt favored an Anglo-American offensive in 1942 because he had promised Russian Foreign Minister Vyacheslav Molotov in May 1942 to expect a "second front" before too long and because he wanted to get Americans into action against the Germans before the end of the year for morale purposes.¹² Since Prime Minister Churchill was favorably inclined toward an Anglo-American military operation in French North Africa in 1942, the Allies ultimately agreed to conduct Operation TORCH, an Anglo-American invasion of French North Africa in late 1942.¹³

The final plan for Operation TORCH included the employment of three task forces. The Eastern Task Force, under the command of the British First Army Commander, Lieutenant General Kenneth Anderson, would land at Algiers and would include 9,000 American troops in the initial landing. The Center Task Force of 18,500 American troops commanded by Major General Lloyd Fredendall would land at Oran. Finally, the 24,000 man Western Task Force, which consisted exclusively of American troops, would land on the Atlantic coast of North Africa to capture Casablanca.¹⁴ Significantly, Operation TORCH would provide the U.S. Army with its

first opportunity to test the recently developed amphibious doctrine under fire. The focus of our interest, the Western Task Force, was subsequently organized into three sub-task forces. The main effort was entrusted to Sub-Task Force BRUSHWOOD, a 19,364 man force consisting primarily of the U.S. Army's 3d Infantry Division, reinforced. The 3d Infantry Division Commanding General, Major General Jonathan W. Anderson, was also commander of Sub-Task Force BRUSHWOOD.

During the summer of 1942, prior to its deployment overseas for participation in Operation TORCH, the 3d Infantry Division's amphibious warfare training program focused on critical ship-to-shore movement tasks. A series of amphibious exercises were scheduled. During August 1942, the division participated in a regimental sized amphibious assault landing in the Monterey Bay area.¹⁵ This exercise focused on refining the skills required to conduct a successful ship-to-shore movement as well as the skills needed to establish a beachhead once ashore.¹⁶ Naval aircraft added realism to the exercise by conducting simulated strafing missions as the ground combat element conducted its ship-to-shore assault landing.

Prior to embarking for French Morocco, the 3d Infantry Division conducted its final "practice" amphibious operation. During late August 1941, the division moved to Camp Pickett, Virginia for a month, where it participated in Exercise QUICK.¹⁷ The exercise originated at Norfolk, Virginia with the embarkation of Sub-Task Force BRUSHWOOD (3d Infantry Division reinforced for assault landing operations) and culminated with an amphibious assault landing of the sub-task force in the vicinity of Solomon's Island.¹⁸

Sub-Task Force BRUSHWOOD's four month training period leading up to its employment in North Africa provided several insights which were relevant to the command and control of ship-to-shore movements. First of all, the division leaders, particularly regimental and battalion commanders, recognized the

significance of the linkage between the task organization of the ground combat element and the manner in which various units were embarked on transports. Consequently, every effort was made to strengthen command and control functions during the various practice landings by insuring that the task organization of the ground combat element was based on the integrity of units. This was required within the units in order to execute future missions once ashore. An additional command and control benefit associated with this method of task organization was that it worked to counter "friction" during the ship-to-shore movement. This was accomplished by insuring that at least a platoon level leader was in each wave which arrived ashore during the assault landing. The ground combat element was organized to counter the "friction" expected on the beaches during the assault landing.¹⁹

The employment of supporting arms was a serious shortcoming associated with Sub-Task Force BRUSHWOOD's preparation for Operation TORCH. While the regimental and battalion commanders were able to incorporate the employment of naval air support in some of their practice ship-to-shore movements, they were extremely short-sighted concerning the impact naval gunfire would have on the command and control of the ship-to-shore movement. The existing doctrine clearly articulated the difficulty associated with the employment of naval gunfire in close support of infantry during assault landings.²⁰ Some provisions should have been made during the practice landings to insure that the requisite command and control measures were in place adequately to control naval gunfire during the ship-to-shore movement.

Perhaps the challenge which would tax the command and control sinews of Sub-Task Force BRUSHWOOD most extensively was the requirement to integrate a few hundred replacements into the sub-task force after Exercise QUICK. While the influx of replacements prior to a major operation during World War II was not

unique to amphibious operations, it could be argued that the effects were felt most during the assault landing, when untrained troops were required to execute one of the most complex military operations under enemy fire. In spite of the aforementioned problems, General Anderson's Sub-Task Force BRUSHWOOD departed Norfolk, Virginia on 24 October 1942 for French Morocco, where it would make history as part of the U.S. Army's first amphibious operation.

SECTION III

U.S. ARMY AMPHIBIOUS DOCTRINE AND THE NORTH AFRICAN EXPERIENCE:

SUB-TASK FORCE BRUSHWOOD, 1942

The task organization of Sub-Task Force BRUSHWOOD's battalion landing teams (BLTs) facilitated command and control. During the embarkation process at Norfolk, Virginia on 24 October 1942, a conscious effort was made to insure that the sub-task force was embarked in such a manner as to require no reshuffling of personnel or equipment once the sub-task force arrived in the transport area off the coast of French Morocco and prepared for the assault landing. More importantly, the sub-task force was embarked in such a manner as to facilitate future land operations once they arrived ashore and moved toward Casablanca. Essentially, the three infantry regiments were task organized into nine battalion landing teams. Each battalion landing team received enough combat support assets to allow it to fight with a minimum amount of support from the division, except for naval gunfire and air support. In Sub-Task Force BRUSHWOOD, the 3d Infantry Division was reinforced by the 67th Armored Battalion Combat Support Team from the 2d Armored Division; two companies of the 756th Tank Battalion (light); elements of the 443d AAA AW Battalion, 36th Engineer Regiment (C); and one

battalion of the 20th Engineer Regiment and several smaller attachments.¹

As Sub-Task Force BRUSHWOOD, the 3d Infantry Division with reinforcements conducted the main attack of General Patton's Western Task Force. The tactical mission of Sub-Task Force BRUSHWOOD was to conduct an amphibious assault landing at Fedala, Morocco, then attack toward the northwest and seize the French Moroccan port city of Casablanca. Sub-Task Force BRUSHWOOD's intelligence reports estimated that the Vichy French defenders expected to oppose the assault landings consisted of about a battalion and a half of infantry in Fedala, two or three anti-aircraft batteries, a coastal gun battery off Cape Fedala, a field artillery battery and two troops of Moroccan Spahis (cavalry).² In devising the tactical plan for the assault landings, the sub-task force staff recognized the necessity of destroying, at the earliest possible moment, the powerful enemy coastal defense batteries at Cape Fedala and north of Pont du Blondin. Until these batteries were destroyed, no U.S. Navy landing craft could safely approach shore nor could the port of Fedala be used to supply troops in the subsequent attack on Casablanca.³ The 7th Infantry Regiment, consisting of three battalion landing teams, was assigned the mission of capturing the town of Fedala and the Cape of Fedala, and was to destroy the coastal defense guns on the Cape of Fedala. The 30th Infantry Regiment, consisting of three battalion landing teams, received the mission of attacking and destroying the coastal defense guns on Pont du Blondin. Additionally, the regiment was to protect the rear and left flank of the sub-task force. The 15th Infantry Regiment, consisting of three battalion landing teams, was to land as the sub-task force's reserve regiment, prepared to pass inland on the left of the 7th Infantry Regiment and, in conjunction with the 7th Infantry Regiment, move to Casablanca.⁴

Sub-Task Force BRUSHWOOD's command and control problems began to appear even as the transport ships sailed into the transport area. The flagship and several

other transports arrived in the transport area near midnight on 7 November 1942. As the transfer of troops from transports to landing craft commenced, it was discovered that an unexpected current had carried all the transport ships 10,000 yards away from their planned positions.⁵ This diversion caused H-hour to be delayed twice; from 0400 to 0430 hours and from 0430 to 0445 hours. The initial assault units did not land ashore until 8 November 1942 at 0500 hours.

The landing of the 1st Battalion Landing Team, 7th Infantry Regiment (BLT 1-7) was hampered by poor navigation and by inaccurate naval gunfire. Command and control difficulties appeared immediately as the battalion landing team arrived ashore. The majority of the battalion landing team was scheduled to land at Beach RED-2 but actually landed at Beach RED-3. Additionally, those units which did not land on the wrong beach landed on reefs which separated Beach RED-2 and Beach RED-3, northeast of Fedala.⁶ The impact of "friction" threatened to unhinge the command and control structure which had been established within the battalion landing team.

The battalion commander and other small unit leaders were able to counter the initial impact created by the confusion of landing on the wrong beaches and were able to continue with the initial land mission. The battalion's initial mission, once ashore, consisted of neutralizing a battery of coast artillery positioned on Cape Fedala as well as an enemy anti-aircraft battalion positioned in the vicinity of a race track located south of Fedala. The anti-aircraft battalion was neutralized in short order by a limited ground attack. The concept for neutralizing the coast artillery battery dictated that the command and control functions needed to be well coordinated if the mission was to succeed. The supporting arms structure would be required to place naval gunfire on the coastal artillery battery while ground elements from the battalion landing team moved against the position. The lifting of naval gunfire as the assault forces

approached the objectives would be critical to insure that the enemy was neutralized and friendly casualties from the effects of naval gunfire would be minimized.

The inability to coordinate the use of naval gunfire hampered the assault landing of the 1st Battalion Landing Team, 7th Infantry Regiment. The erratic effects from naval gunfire firing on the Cape Fedala battery immobilized the ground assault on the position.⁷ The intense shelling of Cape Fedala combined with fires from the battalion's artillery battery, ultimately caused the enemy to surrender before a second ground assault on the position could be mounted.⁸

While the 1st Battalion, 7th Infantry Regiment accomplished its initial mission ashore, the battalion experienced several command and control problems which impacted on the operation. Undoubtedly, the most severe command and control problem was the lack of coordination between the assault unit and the gunfire support ships which resulted in the effects from naval gunfire falling on friendly troops ashore. The general plan of naval gunfire support did not include any prearranged fire on targets prior to or after H-hour. This concept for naval gunfire allowed the naval fire support ships to fire on any enemy shore batteries which fired on them. This resulted in some of the battalion landing team's assault units being fired upon by friendly naval gunfire.⁹

Although there was a dedicated radio net established for the purpose of communications between the fire support ships and the battalion landing team's shore fire control party, an Army Ground Forces observer who observed the assault landing attributed the poor naval gunfire performance to a lack of communications discipline by the radio operators aboard the fire support ships. Apparently, radio operators aboard the support ships started to communicate routine messages over the radio net dedicated for naval gunfire while the fight against the Vichy French forces was still in progress.¹⁰ While the procedures were in place to

control the supporting arms fire during the ship-to-shore movement, a lack of discipline by the radio operators aboard the fire support ships rendered the naval gunfire support system ineffective.

A second major problem reflecting command and control difficulties within the 1st Battalion, 7th Infantry Regiment's assault landing was the landing of units on the wrong beaches. While it was expected that some units would be landed on the wrong beaches during the ship-to-shore movement, the problem became more pronounced as the battalion landed and organized to execute its initial mission ashore. The 1st Battalion, 7th Infantry Regiment, overcame the "friction" associated with the landing of units on the wrong beaches. The battalion commander and his small unit leaders landed with the initial units which arrived ashore and were ideally positioned throughout the battalion landing team. Once the units began landing on the wrong beaches, the small unit leaders exerted the necessary control in order to diminish confusion on the beaches. The adherence to doctrinal methods for establishing control during the ship-to-shore movement enabled the battalion to accomplish its initial mission ashore.

The neutralization of the Pont du Blondin coastal defenses presented a formidable obstacle to units landing at the eastern end of Fedala Bay. The enemy 138 mm coastal defense guns at Pont du Blondin controlled the approaches to two of the primary beaches, Beach BLUE-1 and Beach BLUE-2, where two of Sub-Task Force BRUSHWOOD's battalion landing teams would come ashore. As long as the Pont du Blondin coastal defense guns were operational, Sub-Task Force BRUSHWOOD was precluded from using two of its primary beaches, a situation which would undoubtedly slow Sub-Task Force BRUSHWOOD's planned advance on Casablanca. While most of the 2d Battalion Landing Team, 7th Infantry Regiment (BLT 2-7) was able to come ashore near Pont du Blondin, the battalion's reserve company landed on the wrong beach as did the BLT 2-7 battalion commander, Lieutenant Colonel Rafael

L. Salzmänn. This required these units from BLT 2-7 to fight past Pont du Blondin in order to join the remainder of the battalion.¹¹

The 2d Battalion Landing Team, 30th Infantry Regiment (BLT 2-30) played an integral part in the reduction of the Pont du Blondin coastal defense guns. Units of BLT 2-30 started landing on Beach BLUE-2 as early as 0500 hours, landing east and west of Pont du Blondin. As the units came ashore, they were engaged by effective enemy machine gun fire from Pont du Blondin. Shortly after most of BLT 2-30 units arrived ashore, two company commanders took the initiative and organized an operation to silence the menace of the Pont du Blondin guns. While the units organized for the attack on Pont du Blondin were a conglomerate of small units from BLT 2-30, they collectively formed a small combined arms team.¹² As the force commenced its attack, heavy naval gunfire began falling near the friendly soldiers as they advanced toward Pont du Blondin. The naval gunfire was extremely inaccurate and caused several friendly casualties.¹⁴ In addition to naval gunfire, indirect fire was provided by the battalion's artillery battery and mortars. Once the supporting arms fire was lifted, three ground attacks were launched simultaneously against Pont du Blondin. The two ad hoc BLT 2-30 units attacked from the northeast and the southwest while LTC Salzmänn's small unit attacked Pont du Blondin from the west.¹⁴ The Vichy units which manned Pont du Blondin surrendered shortly before 0800 hours on 8 November 1942.

The examination of the neutralization of Pont du Blondin reveals several critical command and control problems. The most glaring example of a lack of command and control of the supporting arms is provided by an examination of the neutralization of Pont du Blondin. As mentioned earlier, no less than three types of indirect fire weapons saturated Pont du Blondin. While this may have accomplished the mission, it pointed out a serious deficiency in supporting arms coordination. The fact that there was only a single coastal defense battery like

Pont du Blondin which opposed the assault landing certainly worked to the advantage of Sub-Task Force BRUSHWOOD. It is doubtful that the sub-task force would have had sufficient ammunition to reduce several coastal defense batteries of the magnitude of Pont du Blondin given the lack of fire support discipline displayed during the neutralization of Pont du Blondin. While it can be argued that a radio transmission from a unit ashore back to the supporting arms aboard fire support ships may have been a better method to inform the supporting arms to lift naval gunfire support, the existing doctrine stipulated that pyrotechnic signals be used to transmit coordinating signals of the highest priority between the unit(s) ashore and supporting arms aboard ships.¹⁵ Regardless of the means used by the unit ashore to communicate with the supporting arms aboard ships, some type of a "fail-safe" or "back-up" means of communication should have been used to insure that the units which attacked Pont du Blondin did not become stalled because a pyrotechnic signal to lift the supporting arms fires was not received by the ships which provided the naval gunfire support.

The Pont du Blondin attack was successful because leaders adhered to basics. Nothing caused more confusion and chaos during Sub-Task Force BRUSHWOOD's ship-to-shore movement than the landing of units on the wrong beaches. This was one concern which did not create serious problems for the BLT 2-30 units which had the mission to attack Pont du Blondin. The fact that they landed on the proper beaches certainly helped to minimize the "friction" which could have occurred had BLT 2-30 landed on the wrong beaches. The Pont du Blondin attack was successful because soldiers at the lowest levels knew the attack plan and the subordinate leaders accomplished the mission based on the "mission" orders issued by the regimental commander at the beginning of the operation.¹⁶

Following the seizure of Pont du Blondin, two battalion landing teams, a regimental landing group, and selected units came ashore.¹⁷ The task of landing

the 3d Battalion Landing Team, 7th Infantry Regiment, concluded at about 1015 hours on 8 November 1942. Once ashore, the unit consolidated at a prearranged coordinating line and proceeded south towards Casablanca.¹⁸ The 3d Battalion Landing Team, 30th Infantry Regiment, completed its landing by 1030 hours on 8 November 1942.¹⁹

The 15th Infantry Regimental Landing Group was Sub-Task Force BRUSHWOOD's reserve and was the last major unit to land on 8 November 1942. While the unit was scheduled to land on Beach RED-1 and Beach RED-2, "friction" modified the plans; this was caused primarily because coxswains were unfamiliar with the shoreline and had to land the majority of the unit during the hours of darkness. Once ashore, the unit established contact with the 7th Infantry Regiment on its right, moved into an assembly area east of the Route No.1 bridge and remained there until given a subsequent mission for the attack on Casablanca.²⁰

The early success of Sub-Task Force BRUSHWOOD's ground combat units hastened the transfer of command ashore. One of the true measures of effective command and control during the ship-to-shore movement of an amphibious assault landing is the amount of time it takes to transfer command from the amphibious task force commander to the landing force commander. Transferring command ashore is a function of how quickly the supporting arms units can be established ashore to insure uninterrupted support of the ground combat element as it expands the beachhead and conducts subsequent land operations. One of the primary reasons why Sub-Task Force BRUSHWOOD transferred command ashore rapidly was that small unit leaders, battalion commanders and below, maintained positive control of their units during the landing and were able to modify the tempo of the operation based on their personal assessment of the situation. The benefits of this type of command, coupled with moderate enemy resistance, allowed advanced command post elements of Sub-Task Force BRUSHWOOD to land on Beach BLUE-2 at 0830 hours on 8

November 1942 under the control of the assistant division commander.²¹ General Patton assumed command of operations ashore as the landing force commander on 9 November 1942, only one day after the ship-to-shore movement had started. Transferring command ashore officially completed the assault landing; the landing force was free to conduct land operations under the command of the landing force commander.

While Sub-Task Force BRUSHWOOD successfully conducted its assault landing at Fedala, French Morocco, the operation had its share of command and control difficulties. The mission was accomplished successfully primarily because small unit leaders were able to overcome the "friction" associated with the initial assault landing and maintain positive control of their units. Additionally, the sub-task force adhered to doctrinal principles of command and control by insuring that leaders were positioned throughout the battalion landing teams during the ship-to-shore movement in order to minimize the chaos associated with the assault landing. Furthermore, the sub-task force leaders at the regimental and battalion levels realized the advantages to be achieved by using the supporting arms and attempted to make effective use of these assets. While there were several instances which illustrated coordination problems between supporting arms and the ground combat element, leaders used their initiative and depended on "mission" orders to accomplish the sub-task force's mission. The need for initiative at all levels was readily demonstrated in the neutralization of the Pont du Blondin coastal defense guns. While amphibious doctrine clearly outlined the need for independent action by units during the ship-to-shore movement of an assault landing, the leaders of Sub-Task Force BRUSHWOOD provided the initiative which codified amphibious doctrine and transformed it into reality.

SECTION IV

U.S. ARMY/MARINE AMPHIBIOUS DOCTRINE AND THE KOREAN WAR: INCHON LANDING, 15 SEPTEMBER 1950

The situation which confronted the U.S. armed forces during the initial phase of the Korean War once again required an amphibious landing to be used to thrust American units ashore. Within 72 hours after the initial North Korean attack into South Korea on 25 June 1950, the In Min Gun, or North Korean People's Army (NKPA), had arrived in Seoul and sent the Republic of Korea (ROK) Army retreating across the Han River just south of the capital. On 1 July 1950, two battalions from the U.S. Army's 24th Infantry Division landed at an airstrip outside of Pusan.¹ As the fighting continued into September 1950, the U.S. Eighth Army formed a perimeter defense which centered around the port of Pusan and stabilized the situation. The Pusan Perimeter stalemate placed both the North Korean units and the U.S. Eighth Army in a precarious position. U.S. Seventh Fleet carrier based aircraft provided close air support to U.S. Eighth Army units, denying the North Koreans use of the South Korean east coast to supply their troops. This forced the North Koreans to funnel all supplies for their units in the Pusan Perimeter through Seoul. The North Koreans could not exploit the U.S. Eighth Army's lack of combat power since all North Korean personnel and logistic resources were being committed to fixing the U.S. Eighth Army in place.² General of the Army Douglas MacArthur, Commander in Chief of the United Nations Command, believed he could capitalize on the North Korean disadvantage, recapture Seoul, and get the U.S. Eighth Army on the offense again by conducting an amphibious landing at Inchon with the intent of striking at the enemy's unprotected rear and severing the logistical lines which ran through Seoul in support of the North Korean Army.³ General MacArthur favored an amphibious landing at Inchon because he believed that the amphibious landing provided the

United Nations Command with the most powerful means of striking deep and hard into enemy-held territory.⁴

From the outset of planning for an amphibious landing at Inchon, the composition of the ground combat element remained unsettled. Initially, the U.S. Army's 1st Cavalry Division was considered as the ground combat element for the assault landing at Inchon, but this concept was abandoned in early July 1950 when the unit was rushed to the Central Korean Front. Once the 1st Cavalry Division could no longer be used for the Inchon Landing, General MacArthur worked increasingly hard to obtain the 1st Marine Division as the assault force for the Inchon Landing. The follow-on division would be the U.S. Army 7th Infantry Division. Collectively, these two divisions formed the U.S. X Corps commanded by Major General Edward M. Almond, U.S. Army, MacArthur's chief of staff. The greatest obstacle to obtaining the 1st Marine Division for the Inchon Landing was the fact that the division was not at full strength and one of its three regiments, the 5th Marine Regiment, had just been committed to the Pusan Perimeter defense. The 1st Marine Regiment was understrength and 7th Marine Regiment had not been formed.⁵ The depleted 1st Marine Division which consisted of 3,386 personnel, remained at Camp Pendleton, California after the 5th Marine Regiment shipped out for Pusan, and was subsequently filled with more than 19,000 officers of the U.S. Marine Corps and Navy.⁶ Major General Oliver Prince Smith assumed command of the 1st Marine Division in July 1950.⁷

Getting the 5th Marine Regiment to the Inchon objective area required that the unit be disengaged from the Pusan Perimeter. Essentially, General Walton H. Walker, Commanding General U.S. Eighth Army, wanted to keep the Marines as part of his Pusan Perimeter defense because they had performed well in previous battles and they formed the base for blunting an impending attack which the North Korean Army was expected to launch during early September 1950.⁸ General Smith,

Commanding General 1st Marine Division, wanted the 5th Marine Regiment disengaged as soon as possible in order to prepare for the Inchon Landing. After several heated discussions between admirals and generals with differing views concerning the disengagement of the 5th Marine Regiment, the issue was taken to General MacArthur for a decision. General MacArthur decided that the 5th Marine Regiment would be detached from the U.S. Eighth Army on the night of 5-6 September 1950 in order to prepare for the Inchon Landing.⁹ The 5th Marine Regiment departed Pusan on 13 September 1950 and arrived in the Inchon objective area by 14 September 1950.¹⁰

Intelligence on enemy units who would oppose the U.S. X Corps at Inchon was sketchy. General MacArthur's intelligence officer had anticipated, and this later proved correct, that the U.S. X Corps would encounter almost no naval or air opposition at Inchon on D-day.¹¹ The intelligence on enemy ground units was less accurate. Early in September 1950, U.S. X Corps intelligence estimates placed 1,500 to 2,500 NKPA troops in the immediate Inchon area.¹² From 400 to 500 NKPA troops were believed to be garrisoning Wolmi-do, 500 NKPA troops defending Kimpo and the balance of troops in and about Inchon.¹³ (NOTE: This study will focus on the activities of the 1st Marine Division and its tactical role as the X Corps' assault force for the Inchon Landing rather than on the X Corps' operational role in the Inchon Landing.)

The irregularities of the Inchon tides required the 1st Marine Division's assault landing to be executed in two phases. On 15 September 1950, a maximum high tide of 31 feet could be expected at 1919 hours. Evening twilight came at 1909 hours. It was estimated that 23 feet of water would take the landing craft, vehicle and personnel (LCVPs) and landing vehicles, tracked (LVTs) over the mud flats, but that 29 feet of water would be required for the beaching of the landing ship, tank (LSTs).¹⁴ From a command and control standpoint, the 1st

Marine Division planners wanted to assault Inchon with a two-pronged attack during the morning. This would facilitate control by centralizing the ship-to-shore movement and insuring that all units would arrive ashore while the tide was high enough to carry the LSTs ashore. The disadvantage of attempting to have the entire ground combat element assault Inchon during the morning also impacted on the command and control of the ship-to-shore movement. Essentially, a night approach into the objective area would be required in order to assault Wolmi-do at 0600 hours during the morning high tide. Additionally, the slowest and least maneuverable transports would be required to negotiate the mud-lined channels leading to the objective area in the dark. If the transports were positioned in the wrong locations, due to darkness, the subsequent ship-to-shore movement could become a disaster if the assault units landed on the wrong beaches as a result of the transports being in the wrong positions. In view of this situation, it was decided that the more maneuverable transport vehicles with radar navigational instruments would be used and that the assault would be conducted in two phases.¹⁵

The 1st Marine Division's concept for the Inchon Landing consisted of morning and evening assault landings. The morning landing on Wolmi-do would be made with a single battalion of the 5th Marine Regiment. The remaining two battalions of the 5th Marine Regiment would come ashore on the mainland at RED Beach during the evening high tide, just north of the causeway connecting Wolmi-do and Inchon, while two battalions of the division artillery would come ashore on Wolmi-do. Simultaneously, the 1st Marine Regiment would come ashore on BLUE Beach, southeast of Inchon. The two regiments were to push inland and make a junction during the morning of 16 September 1950 and seize the beachhead while the 17th Republic of Korea (ROK) Regiment, later replaced by the 1st Korean Marine Regiment, mopped up any resistance remaining in the city.¹⁶

A five-day bombardment of Wolmi-do by naval gunfire and Marine and Navy aircraft softened NKPA resistance. Commencing on 10 September 1950, Marine aircraft from VMF-323 and VMF-214 launched from aircraft carrier-escorts (CVEs) conducted a series of attacks on suspected enemy artillery positions on Wolmi-do. Once the CVEs returned to Sasebo, Japan for replenishment on 11 September 1950, carrier-based Navy aircraft from TF-77 bombed Wolmi-do and Inchon until 14 September.¹⁷ The pre-invasion bombardment ultimately proved to be instrumental in destroying the NKPA's will to resist.¹⁸

The effects of naval gunfire and close air support combined with ground combat action to crush any meaningful NKPA resistance on GREEN Beach. At 0540 hours on 15 September 1950, destroyers poised off the shore of Wolmi-do commenced firing on GREEN Beach, the landing site of the 3d Battalion, 5th Marine Regiment. The naval gunfire, augmented by fires from Marine Corsairs from VMF-214 and VMF-323, continued until 0633 hours when the first unit of the 3d Battalion, 5th Marine Regiment came ashore. The battalion experienced no command and control problems while it conducted its ship-to-shore movement. Once ashore, the battalion rapidly seized its primary objective, Radio Hill, as well as its secondary objective on the opposite shore of Wolmi-do which linked the island to Inchon.¹⁹

The coordination of command and control functions was clearly illustrated as 3d Battalion, 5th Marine Regiment seized So Wolmi-do. Shortly after the 3d Battalion, 5th Marine Regiment seized Wolmi-do, elements of the battalion turned south and moved along a 900-yard causeway to attack So Wolmi-do. The attack quickly came to a halt when the NKPA defenders placed effective automatic-weapons fire on the approaching Marines. Lieutenant Colonel Taplett, Battalion Commander 3d Battalion 5th Marine Regiment, observed the action from his position on Radio Hill and intervened immediately when enemy fire halted his unit's attack.

Essentially, LTC Taplett capitalized on the existing command and control structure by instructing his forward air controller to call for close air support to neutralize the NKPA defenders. The 3d Battalion, 5th Marine Regiment, controlled So Wolmi-do by 1115 hours on 15 September 1950.²⁰ By noon, both Wolmi-do and So Wolmi-do were secured and advanced echelons of the 1st Marine Division's command post arrived ashore by the evening of 15 September 1950. The morning phase of the Inchon Landing had been accomplished in less than eight hours. The effective command and control linkage between the supporting arms and the ground combat element had been instrumental in the overall success of the morning landing.

Supporting arms fire preceded the evening assault landing on RED Beach. From H-minus 180 minutes onward, continuous supporting arms fire from naval gunfire and aircraft was leveled on Inchon. In spite of this saturation, there was still the possibility that air attacks and naval gunfire could have missed some of the NKPA defenders. As a "fail-safe" mechanism, the 1st Marine Division's Air Attack Force established an alternate control agency aboard the USS George Clymer, utilizing an emergency hookup and a control unit attached to Tactical Air Control, U.S. X Corps. All radio nets were manned and communications established to permit a rapid shift of control to General Cushman, Tactical Air Commander, U.S. X Corps, in case the Tactical Air Direction Center (TADC) on the Mount McKinley was rendered inoperative and emergency air support was required to support the landing force.²¹

The units which came ashore on RED Beach experienced minor command and control problems during the ship-to-shore movement. Once the tide began to swell to its maximum height of 31 feet at about 1645 hours on 15 September 1950, the 1st and 2d Battalions, 5th Marine Regiment began their assault landings on RED Beach. Both battalions secured their initial objectives without problems.

Elements of the 1st Battalion seized Cemetery Hill and held the regiment's left flank while elements from the 2d Battalion cleared the regiment's right flank and secured the high ground in the vicinity of the British Consulate.²² Command and control difficulties surfaced as the two battalions converged on the RED Beach objective, Observatory Hill. Responsibility for securing Observatory Hill was divided between two company-sized units, one from the 1st Battalion and the other from the 2d Battalion. The 1st Battalion unit had responsibility for securing the northern half of the hill, while the 2d Battalion unit had responsibility for the southern half of the hill. As the two units proceeded ashore, they became intermingled and landed on the wrong beaches.²³ This created a delay in the 2d Battalion unit securing its objective. Ultimately, one of the remaining 2d Battalion companies took unnecessary casualties as it attempted to proceed up Observatory Hill before the high ground had been secured by the designated unit.²⁴

The 1st Marine Regiment's assault landing on BLUE Beach was fraught with command and control problems. Colonel Lewis Burwell "Chesty" Puller, one of the U.S. Marine Corps' greatest combat fighters, led the 1st Marine Regiment's assault landing on BLUE Beach. Colonel Puller's mission was to land south of Inchon and seize a beachhead covering the main approach to the city, from which the regiment could advance directly on Yongdungpo and Seoul. To accomplish this mission, the regiment landed two battalions abreast over BLUE Beach; the 2d Battalion landed on the left on BLUE-1; the 3d Battalion landed on the right on BLUE-2 followed by the 1st Battalion.²⁵ Intense naval gunfire and air attacks preceded the assault landings, which commenced at 1730 hours on 15 September 1950. The factors which most hampered the command and control of the ship-to-shore movement were the two-and-a-half mile approach over mud flats to the beach, and the fact that there were only four Navy guide-boats available to

lead in twenty five boat waves to shore (the existing doctrine prescribed a minimum of thirty two guide-boats be utilized for an assault landing of this size.) Additionally, BLUE Beach was down wind of Inchon where smoke from the battles within the city combined with a haze in the area and obscured visibility.²⁶ The guide-boats were able to lead the first three waves of both assault battalions through the haze which hung over the approaches to the beaches. Succeeding units were plagued by a series of problems which ranged from amphibian tractors without compasses or serviceable radios to an unforeseen cross current which pushed several amphibian tractors off course as they approached the beaches.

One of the key reasons why the 1st Marine Regiment was able to accomplish its mission ashore is that in spite of all the "friction" associated with the assault landings, regimental and battalion commanders landed with the first units which came ashore. By H+3 (1800 hours) both of the assault battalions had their respective assault companies ashore, and both battalion commanders were on the beach insuring that confusion did not become chaos. Colonel Puller's "up-front" style of leadership was characterized by his arrival ashore in the third wave of the first unit which came ashore.²⁷ Within twenty four hours after the beginning of the ship-to-shore movement, General Smith assumed command of the division ashore.

General Smith readily admitted that the success of the 1st Marine Division's assault landing at Inchon was due to the professionalism of the Marines who conducted the operation.²⁸ While it would be difficult to contest this fact, it must be remembered that the 1st Marine Division had the benefit of an amphibious doctrine which had been perfected during World War II. Essentially, by the time of the Inchon Landing, amphibious doctrine concerning command and control procedures for ship-to-shore movements had been resolved as well as many of the

shortcomings associated with the coordination of the supporting arms and the ground combat element identified during World War II amphibious assault landings. Naval gunfire could be lifted and shifted with ease to support the ground combat element, and close air support could usually be provided within minutes as demonstrated during the assault on So Wolmi-do. A principle which influenced command and control for Sub-Task Force BRUSHWOOD, during World War II, as well as the 1st Marine Division during the Inchon Landing was that leaders positioned themselves throughout the units during the ship-to-shore movement, and were in the initial waves as the ground combat elements arrived ashore. In the midst of confusion, these leaders were able to insure that the mission was accomplished in spite of the "friction" associated with an amphibious assault landing.

SECTION V

ANALYSIS OF COMMAND AND CONTROL IN CURRENT AMPHIBIOUS DOCTRINE

IN VIEW OF WORLD WAR II AND KOREAN WAR EXPERIENCES

Current amphibious doctrine for command and control of ship-to-shore movements is limited and requires amplification. Field Manual 31-11 Doctrine for Amphibious Operations, (also known as Landing Force Manual 0-1), the primary doctrinal manual for amphibious operations, only addresses command and control of ship-to-shore movements in a general manner. While the manual mentions the need for the tactical integrity of troops during the ship-to-shore movement ashore, it only devotes two sentences to this concept. The paragraph which addresses this important concept mentions the fact that tactical integrity facilitates control ashore, but fails to emphasize the importance of this principle as it pertains to facilitating the execution of the land campaign which follows the amphibious assault landing.

Although the point at which command is passed ashore from the amphibious task force commander (CATF) to the landing force commander (CLF) is situational, current amphibious doctrine provides little definitive guidance as to when the transfer of command ashore should occur. Undoubtedly, one of the most important decisions which must be made by the CATF is determining when, during the amphibious assault landing, command should be transferred from the CATF to the CLF. While the CATF is responsible for actually making this decision, he makes it based on advice from the CLF and supporting arms agencies and their assessments of the progress being made toward establishing a secure beachhead ashore. Again, Field Manual 31-11 only discusses the transfer of command ashore in a single paragraph. The paragraph also mentions that the CATF uses his discretion in determining when control of operations is passed ashore to the CLF. There is no argument about the fact that the CATF's professional judgment should be the deciding factor in making this crucial decision. A better doctrinal treatment of this issue, however, would provide considerations the CATF uses in making his decision.

The heavy doctrinal reliance on radios for control during the ship-to-shore movement results in under emphasizing the need for subordinate commanders to know and understand the commander's intent. Current amphibious doctrine states that during the assault phase, radios are the primary means of communication; it can be argued that a plan which depends on radios for success is doomed to failure from the start. The existing electronic counter measure capabilities available to the enemy virtually negates the use of radios as a reliable means of passing orders for command and control purposes during a ship-to-shore movement. Furthermore, the density of radio nets and the associated linkage between various elements of the amphibious task force exacerbate the communications problems. While it is acknowledged that there are several supporting arms functions such as

close air support and naval gunfire which are totally dependent on radios in order to function, doctrinal emphasis should be placed on adherence to radio silence during the ship-to-shore movement and the need to know and understand the commander's intent as a means to decrease the over-reliance on radios during the assault phase of the ship-to-shore movement.

Current amphibious doctrine, as expressed in Field Manual 31-11, does not address the unique aspects of having a U.S. Army unit as the ground combat element of a joint amphibious task force. While U.S. Marine units routinely conduct amphibious operations and are task organized for amphibious operations, most U.S. Army units do not conduct such training, nor are they task organized for amphibious operations. The habitual association of the various elements of a Marine Air Ground Task Force (MAGTF) and the routine coordination with the U.S. Navy inherent in most Marine amphibious exercises would therefore not be a given if an Army unit was the ground combat element of a landing force. While this type of relationship could ultimately be established between the U.S. Army and the U.S. Navy, it is a unique aspect of having an Army unit as the ground combat element of the landing force. If Operation TORCH is any guide, communications would be a major consideration in future amphibious assault landings with U.S. Army units as the ground combat element.

As mentioned in Section I of this study, a portion of the Wass de Czege Combat Power Model will be used as a basis for analyzing Operations TORCH and CHROMITE, as well as current amphibious doctrine. The areas which will be analyzed include span of control, standard operating procedures (SOPs) and doctrine, unit/staff efficiency, and adequate communications. The significance of these functions is that they form the basis for efficient command and control during the ship-to-shore movement of an amphibious assault landing because they strengthen decentralized execution and emphasize the use of initiative by small

unit leaders in order to accomplish the assigned mission.

SPAN OF CONTROL

Assaulting units for Operations TORCH and CHROMITE were organized to facilitate operations . Once the units arrived in the transport area, it was imperative for them to devote their total effort toward the upcoming assault landings. In both operations, units were configured for combat, according to assault waves. The command and control advantage which accrued from this arrangement had a high pay off when the units were transferred from transports to assault craft because it minimized the time required for the troops to actually switch from the transports to the assault craft. In the case of Sub-Task Force BRUSHWOOD since it was not known if the landing would be opposed or unopposed an alternate loading plan was considered but rejected. The sub-task force would have been at an extreme disadvantage had its units embarked for a non-tactical landing and then have been required to transload for a combat landing while in the transport area prior to conducting the assault landing.

Decentralized execution by Sub-Task Force BRUSHWOOD allowed its units to seize their objectives early in the operation. An inherent feature of amphibious operations is that the ship-to-shore movement relies heavily on decentralized execution since units must be broken down into small elements in order to transport them ashore. In the case of Sub-Task Force BRUSHWOOD units, this problem was multiplied when the units were scattered during the landings. One of the key factors which contributed to the neutralization of the coastal defenses on Pont du Blondin was the fact that the mission was known down to the lowest levels of command. This increased the chances of the operation succeeding.

Small unit leaders did not require continual communication with their superiors in order to understand what was required to maintain the momentum of the overall operation.

Leaders in the 1st Marine Regiment enhanced control during Operation CHROMITE by positioning themselves well-forward during the assault landings. As mentioned earlier, a shortage of guide-boats was only part of the problem which impacted on control as the 1st Marine Regiment approached Beach BLUE-1. The smoke from fires within Inchon coupled with a haze created a control nightmare. The 1st Marine Regiment leaders adapted to these unusual conditions by insuring that both battalion commanders of the assaulting battalions, as well as the regimental commander, were in the first three assault waves that arrived ashore. As it turned out, this was a wise decision since the other twenty two waves arrived on the beach at locations and times which differed from those originally specified in the plan for the operation.

Current amphibious doctrine recognizes the need for amphibious assault landings to begin centralized and gradually become decentralized as the ship-to-shore movement progresses. Allowing the control of the amphibious assault landing to move along a continuum from centralized to decentralized is a principle derived from past amphibious operations such as Operations TORCH and CHROMITE. The desire by the commander to have "perfect" information is subordinated to the reality that the tempo of the operation moves so rapidly that it is impossible for the commander to know everything and make all the decisions. The doctrinal emphasis on decentralization as the ship-to-shore movement progresses places increased importance on the commander clearly expressing his intent not only to facilitate the ship-to-shore movement, but more importantly, to influence the land operations which follow the ship-to-shore movement.

While the ship-to-shore movement is characterized by decentralized

execution, the CATF and CLF must centralize supporting arms to influence the battle as units arrive ashore. An exception to the decentralization principle deals with the employment of supporting arms. During the ship-to-shore movement, the CATF must provide naval gunfire and close air support to all units going ashore. Since there will probably be more than one unit going ashore at a time, and these in different locations, the CATF retains control of the supporting arms until the units have established a beachhead and control is transferred ashore to the CLF. This allows the CATF to be able to influence the battle while the beachhead is being established. Additionally, this also provides the CLF and his subordinate commanders the opportunity to focus their attention exclusively on the assault landing until control is transferred ashore. Given the myriad of details the CLF must assure are coordinated as he establishes a beachhead, this is an one instance where centralization benefits all concerned.

STANDARD OPERATING PROCEDURES (SOPs) AND DOCTRINE

Since amphibious doctrine was in its infancy at the time of Operation TORCH, several aras of doctrine were vague. As mentioned earlier in this study, Sub-Task Force BRUSHWOOD had its share of command and control problems which were directly related to a force attempting to execute a combat operation based on a doctrine they had not yet internalized. The poor fire discipline displayed by the supporting arms to neutralize Pont du Blondin demonstrated that coordination between the ground combat element and the supporting arms required improvement.

The Inchon Landing vividly demonstrates the execution of a doctrine which had been perfected during World War II. The collective wisdom of U.S. armed forces, based upon the conduct of more than 166 amphibious assault landings

during World War II, helped codify doctrinal principles. By the time of the Inchon Landing in 1950, existing amphibious doctrine had adopted several principles which had guided the execution of World War II amphibious operations. The need for unified command and for teamwork were stressed as essential to the success of an amphibious operation in the 1949 Field Service Regulations. Other principles which emerged as lessons learned from World War II experience included the need for immense concentrations of fires of the supporting arms and centralized control of these fires.¹ A classical example of the perfection of the doctrine was demonstrated during the 3d Battalion 5th Marine Regiment's attack on So Wolmi-do when the battalion commander was able instantaneously to call in eight Corsairs to assist one of his platoons complete the capture of So Wolmi-do.

Since Operations TORCH and CHROMITE were hastily planned and executed, there was little time available to develop detailed standard operating procedures. Both Operations TORCH and CHROMITE were hampered by a shortage of planning time. While doctrine emphasized the need to have a minimum of sixty days to conduct the preparation for an amphibious operation, neither Sub-Task Force BRUSHWOOD or the 1st Marine Division had the prescribed time to to prepare for their operation. In the case of Sub-Task Force BRUSHWOOD, the influx of a large number of replacements prior to deployment to French Morocco certainly did not help to establish standard operating procedures, while the 1st Marine Division had to bring two regiments from different locations to execute the Inchon Landing. Although both of the situations described above are anomalies to doctrine, they are probably accurate portrayals of situations commanders will likely encounter as they attempt to plan and execute future amphibious operations.

UNIT/STAFF EFFICIENCY

Sub-Task Force BRUSHWOOD eliminated enemy resistance rapidly because the commander's intent permeated the unit. As mentioned earlier, the neutralization of Pont du Blondin stands out as a classical example of the benefits derived from units knowing the commander's intent. The ability of small unit leaders to organize scattered units and synchronize an attack on the Pont du Blondin coastal guns, clearly demonstrated the shared understanding by leaders of the need to destroy this weapon system in order for subsequent assault units to come ashore.

The 1st Marine Division's staff was skilled and able to produce an implementation plan for the Inchon Landing in a short period of time. The 1st Marine Division staff exemplifies the skills required to produce clear orders to facilitate amphibious operations. The staff was given the responsibility for the Inchon Landing, and immediately produced implementation orders for their subordinate units. In fact, the 1st Marine Division's operation order for the Inchon Landing was received by their subordinate units before X Corps' operations order reached the division. The 1st Marine Division's excellent staff planning for the Inchon Landing provides a demanding standard for staff efficiency at all levels.

Operation CHROMITE provides a classical example of the ground combat element and the supporting arms working in harmony. The ability of the ground combat element and the supporting arms to coordinate their efforts to concentrate overwhelming combat power on the enemy was a decisive factor which contributed to the success of the operation. As prescribed by the existing doctrine of the period, an intense five day pre D-day bombardment of naval gunfire and air on Wolmi-do and Inchon insured the enemy's will to fight was substantially reduced.

Additionally, once the assaulting troops and the supporting arms were working together to neutralize the resistance on Wolai-do, naval gunfire skillfully placed a "wall" of artillery in front of the troops as they moved forward.² The effects of the artillery fire certainly kept the operation going at a steady tempo.

Small unit leadership and individual initiative are critical to successfully executing an amphibious operation. The complexity of amphibious operations requires small unit leaders to be flexible and innovative. Whether examining Sub-Task Force BRUSHWOOD's activities or those of the 1st Marine Division, it is easy to see the importance of small unit leaders stepping forward and "taking charge" when "friction" threatens to thwart the success of a unit's mission.

ADEQUATE COMMUNICATIONS

The need for skilled communications operators and durable communications equipment was highlighted during Operation TORCH. Among the many lessons learned from Operation TORCH, none are more relevant than those addressing communications. Foremost among the lessons learned is the need to have trained personnel. One of the shortcomings of the communications personnel who provided signal support for the units during Operation TORCH, was that the personnel had not operated or even seen the equipment they attempted to use during the assault landing.³ Furthermore, commanders had to balance the number of communications personnel in the assault units with the need to have maximum combat power in the initial assault waves which went ashore.⁴ While it can be argued that reducing ground combat positions in the initial assault units for communications personnel actually reduced combat power, it must be realized that communications personnel are a means to the end desired the employment of combat power ashore.

Operation CHROMITE illustrated the value of a responsive communications system as a means of projecting combat power. As mentioned earlier, the 3d Battalion, 5th Marine Regiment's attack on So Wolmi-do provides several examples of doctrinal principles being employed ideally. A case in point is the direct communications link between the 1st Marines' close air support controller's request for Corsairs to provide close air support to an attacking unit which had been pinned down by enemy fire as it attacked So Wolmi-do. The ability of the air controller to radio directly to the air support squadron and have close air support in the area of operations highlights the value of such a responsive system as a means to influence operations on the battlefield.

SECTION VI

CONCLUSIONS

A clear understanding of the commander's intent by subordinate units will generally reduce or eliminate the tendency to over rely on radios to control ship-to-shore movements. As illustrated by Sub-Task Force BRUSHWOOD and the 1st Marine Division, it is imperative for small units executing an amphibious assault landing to understand the higher commander's intent. Existing amphibious doctrine highlights radio as the primary means of communications during the ship-to-shore phase of an amphibious operation, yet we must always be cognizant of the enemy's constant efforts to render these means of communications ineffective through jamming and other methods. While it is recognized that a certain number of communications links are imperative for coordination between the landing force and the supporting arms, the goal for using the radio by the landing force during the ship-to-shore movement should be to make as few radio transmissions as possible. Understanding the commander's intent tends to foster a mind set within units that radio transmissions are the exception during the

ship-to-shore movement and not the rule. Evidence from Operations TORCH and CHROMITE strongly suggests that the most successful units relied heavily on the commander's intent as the primary means of communication and used the radio only sparingly.

Historically, amphibious doctrine has recognized the importance associated with transferring command ashore, but has not clearly articulated the considerations which are essential to this process. One of the stated purposes of amphibious operations is to permit the prosecution of future combat operations ashore. With this in mind, doctrine needs to be expanded to provide some of the essentials concerning the "mental process" the amphibious task force commander goes through prior to transferring command ashore to the landing force.

An inherent benefit of modifying amphibious doctrine, as mentioned, is that it would add more structure to a process which is extremely subjective, yet is critical to the execution of the subsequent land campaign. As a minimum, amphibious doctrine should provide guidance on the priority for establishing specific radio nets ashore as well as the requirements needed for control of supporting arms. The most important benefit derived from modifying doctrine concerning the transfer of command ashore is that it provides the amphibious task force commander and the landing force commander with a shared appreciation of the priorities for an operation and it allows the amphibious task force commander to express his intent in relationship to this set of established priorities.

U.S. Army/Marine amphibious doctrine ignores the importance of the human dimension to the ultimate success of amphibious operations. There is a noticeable void in amphibious doctrine concerning the impact soldiers and marines exert on the success or failure of amphibious operations. This is particularly important considering that the amphibious assault is one of the most complex

military operations to execute. Additionally, both U.S. Army and U.S. Marine Corps histories are replete with examples which vividly illustrate the principles espoused in current amphibious doctrine. As illustrated in this study, soldiers/marines and units working within the framework of the commander's intent were instrumental in accomplishing the initial objectives ashore. Current amphibious doctrine should be modified to incorporate examples which demonstrate how individuals have used their initiative to facilitate the control of units during the ship-to-shore movement of amphibious assault landings.

An unchanging precept derived from examining Sub-Task Force BRUSHWOOD's participation in Operation TORCH and the 1st Marine Division's participation in Operation CHROMITE is that ship-to-shore movements are inherently confusing and full of chaos. "Friction" and the "fog of war" dominate the beaches as the ground combat element comes ashore and attempts to seize its initial objectives in the face of enemy resistance. Under these circumstances, a lack of control is differentiated from positive control by the ability of small unit leaders to use their initiative in preventing confusion from becoming chaos as they fight to seize their initial objectives. One key principle concerning the command and control of ship-to-shore amphibious assault landings is that there can be no substitute for individual and unit initiative in winning the initial land battle ashore.

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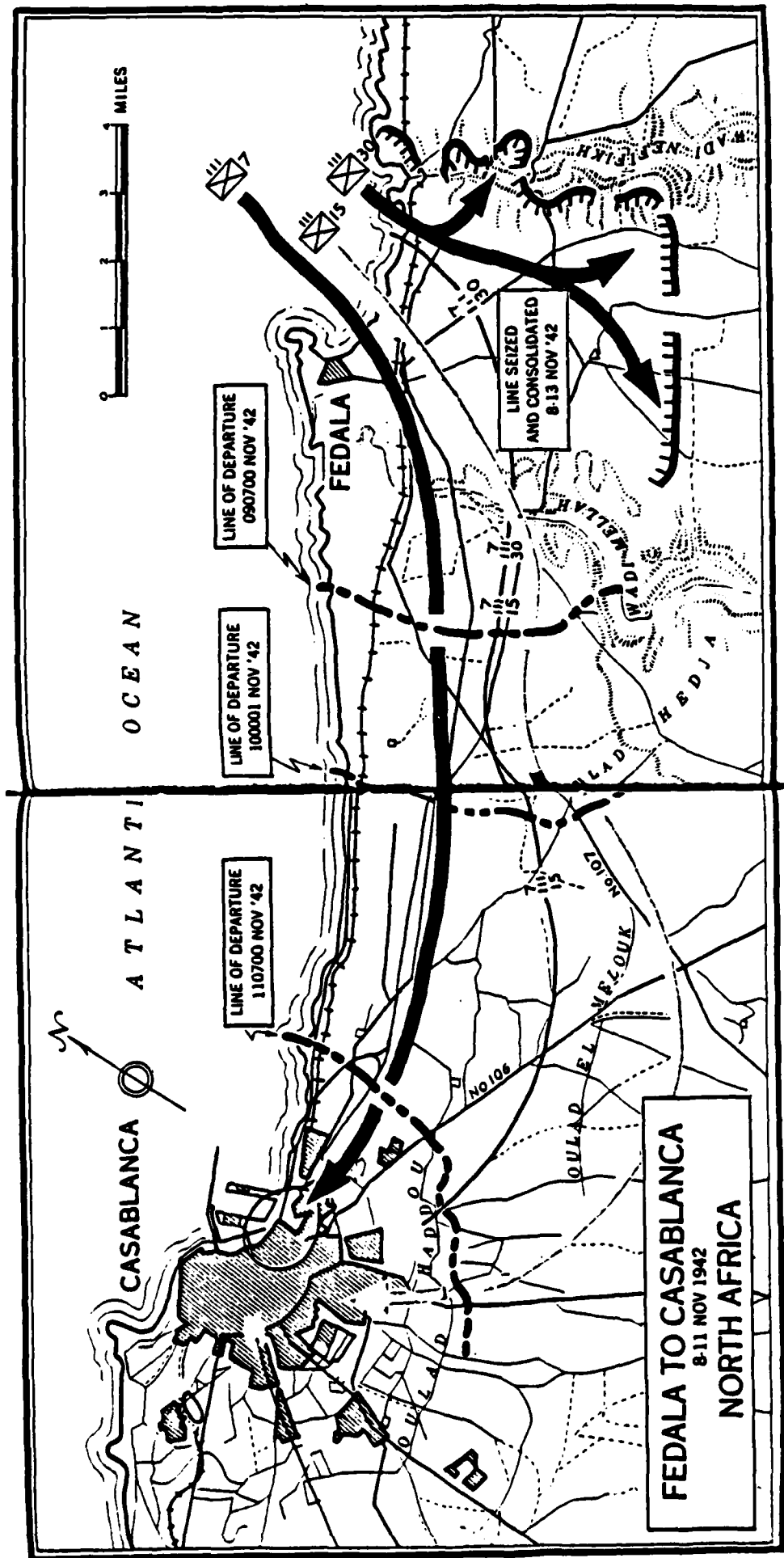
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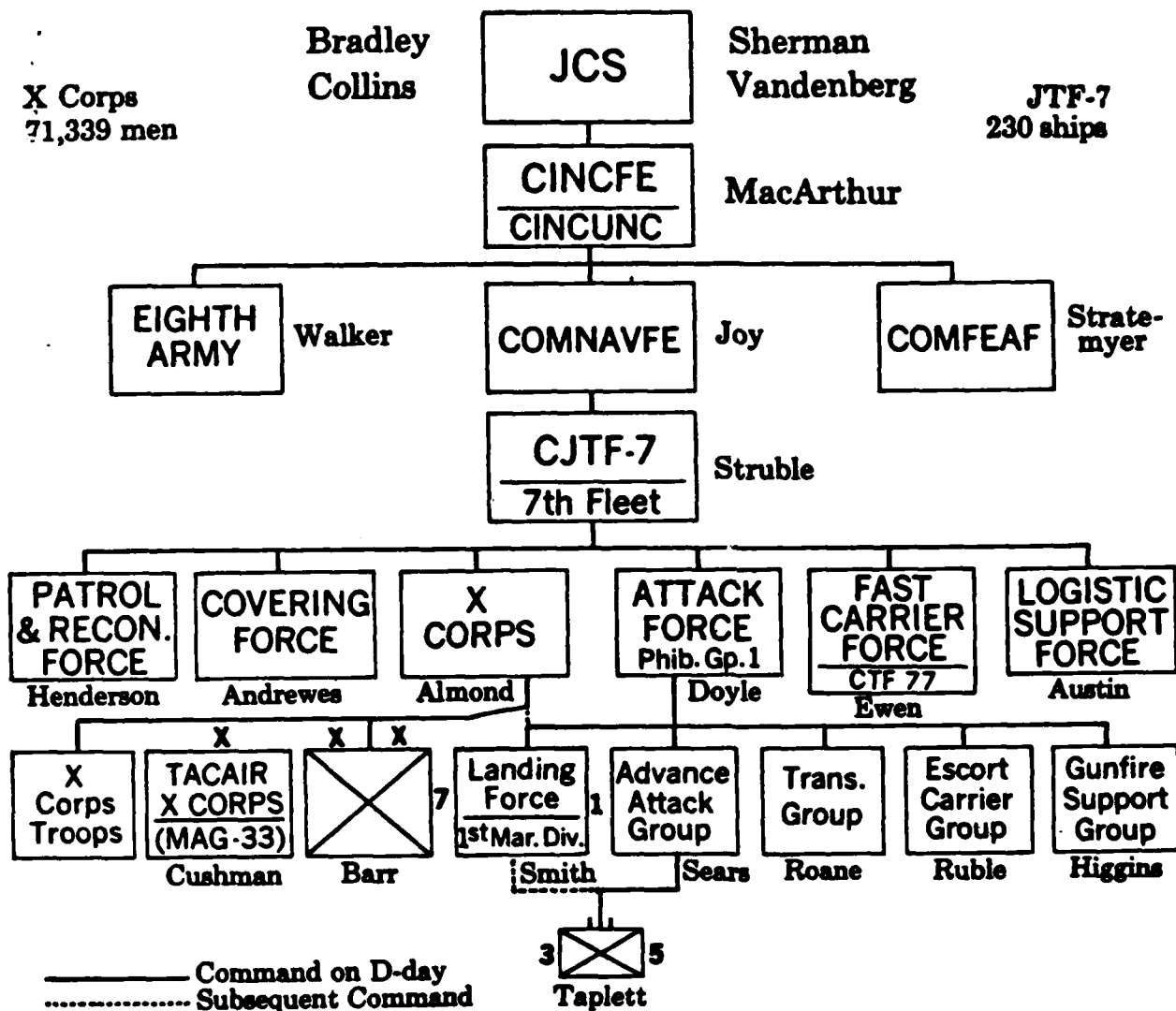
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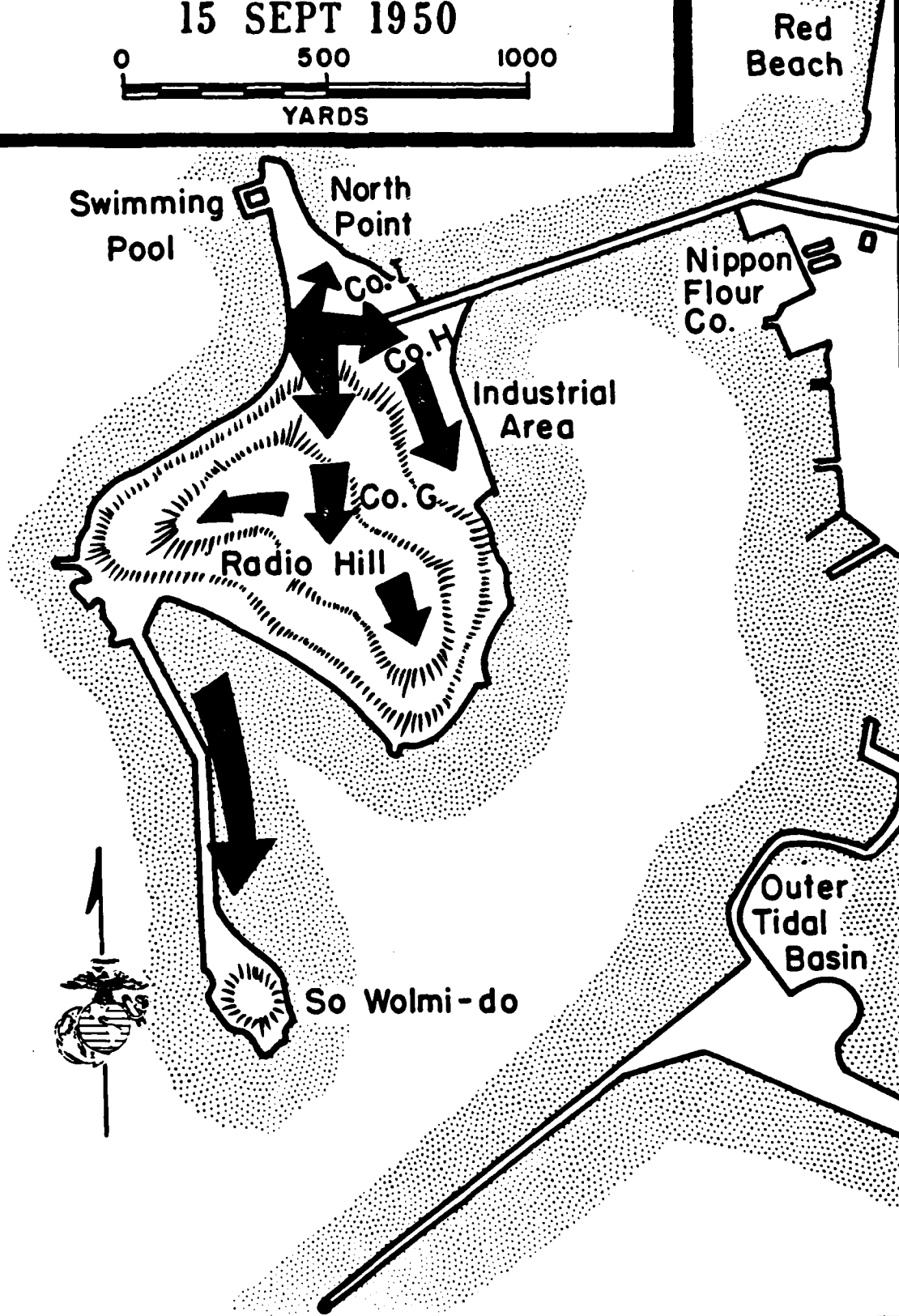


MAJOR FORCES AND COMMAND RELATIONS

Operation "Chromite", D-day

SEIZURE OF WOLMI - DO 3RD BN, 5TH MARINES 15 SEPT 1950

0 500 1000
YARDS



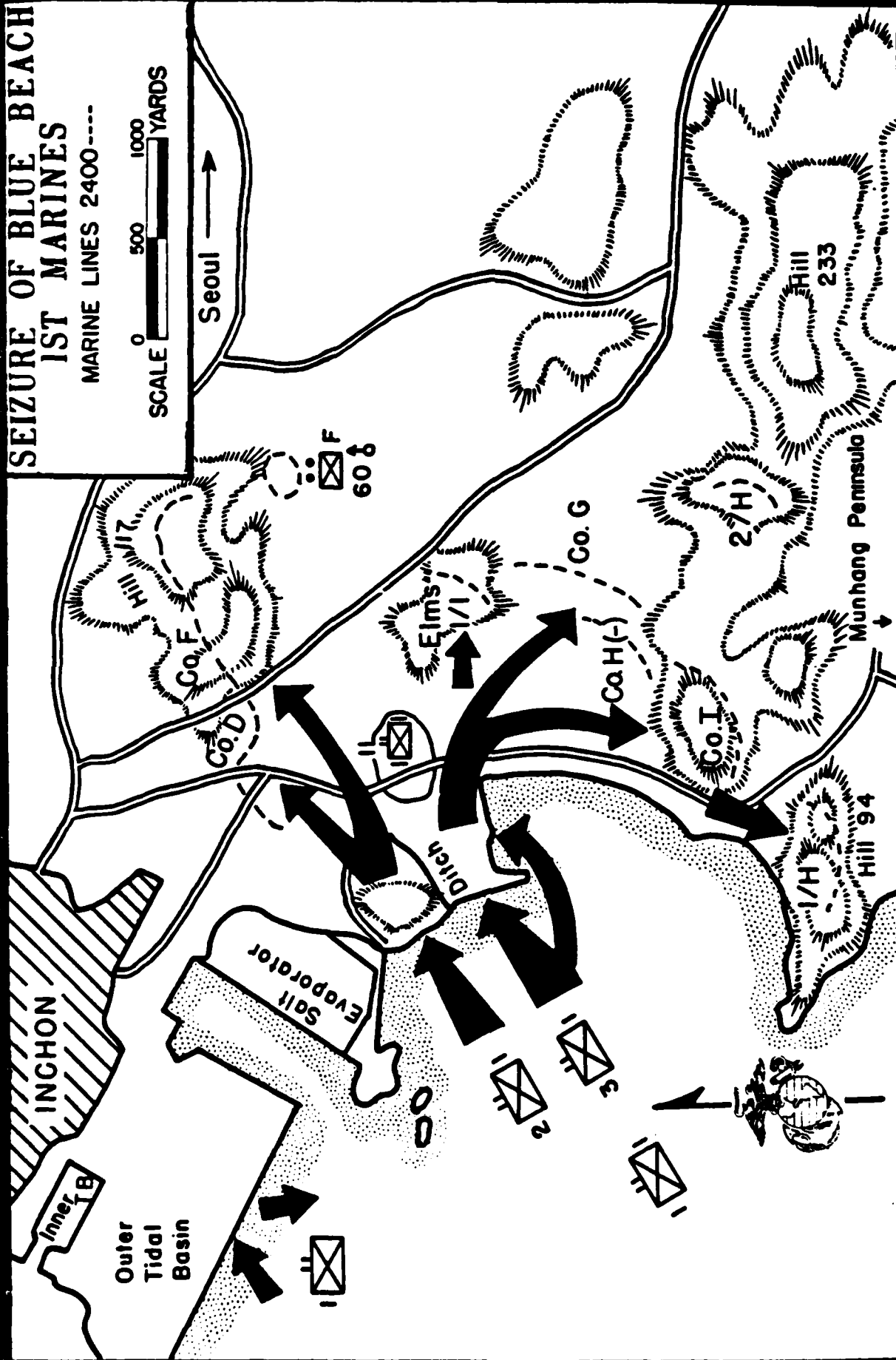
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U. S. Marine Operations in Korea, p. 89.

SEIZURE OF BLUE BEACH 1ST MARINES

MARINE LINES 2400----

SCALE 0 500 1000 YARDS

Seoul →



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WASS de CZEGE COMBAT POWER MODEL
MANEUVER EFFECT MODEL (Extract)

MANEUVER EFFECT is a function of:

Example actions of leaders to:

Amplify own Degrade enemy
combat power by: combat power by:

1. COMMAND, CONTROL AND COMMUNICATIONS

A. Span of Control

Leadership
training

Surprise, EW, isolation,
overwhelm, threaten
multiple objectives

- (1) No. of subordinate units
- (2) No. of supporting/attached
units
- (3) No. of situation
variables

Organization
Task Organization

Anticipate,
maintain, and
update estimate
of situation

Speed of operations

B. SOPs and Doctrine

- (1) Quality
 - (a) Applicability
 - (b) Simplicity
 - (c) Flexibility

Evaluate &
update as needed

- (2) Application

Training

Harassment, speed of
operations to induce
mistakes/misjudgment

C. Staff Efficiency

- (1) Staff Organization

Update
doctrine, put
people in
right jobs

Harassment, speed of
operations

Destroy CPs

- (2) Staff effectiveness

Training, create
"High Performing
Staff"

Speed of operations
to cause
effectiveness
breakdown, surprise

D. Adequate Communications

Electronic
Warfare

- (1) Systems design

Redesign, re-
equip

- (2) Employment of systems

- (a) Redundancy
- (b) Siting of emitters
- (c) Operator profici-
ency
- (d) Discipline in use

Planning
Planning/
training
Training

Training

Destroy emitters
Suppression

Suppression,
surprise

Surprise, speed of
operations

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